

A web app using the Memento® Server and USGS Historical Maps

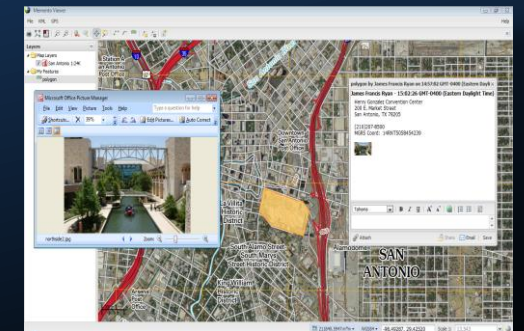
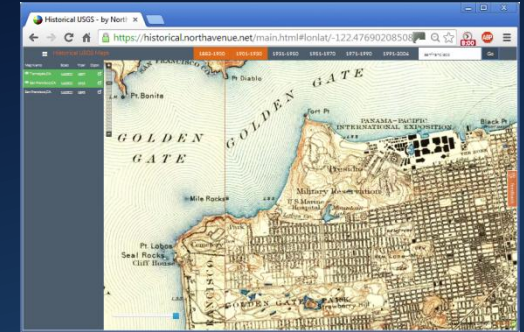
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Overview

- North Avenue Technologies created a web app using its Memento[®] Server and 92,000 geospatial PDFs.
- The geospatial PDFs are a subset of the USGS Historical Topographic Map Collection.
- The Memento[®] Server was developed by North Avenue Technologies using state of the art technology and is soon to be released as a commercial off the shelf (COTS) product.
- The Memento[®] Server is based core capabilities of the Memento[®] Viewer, a seamless geospatial PDF map viewer, originally developed for the US Army Geospatial Center.



Memento[®] Server

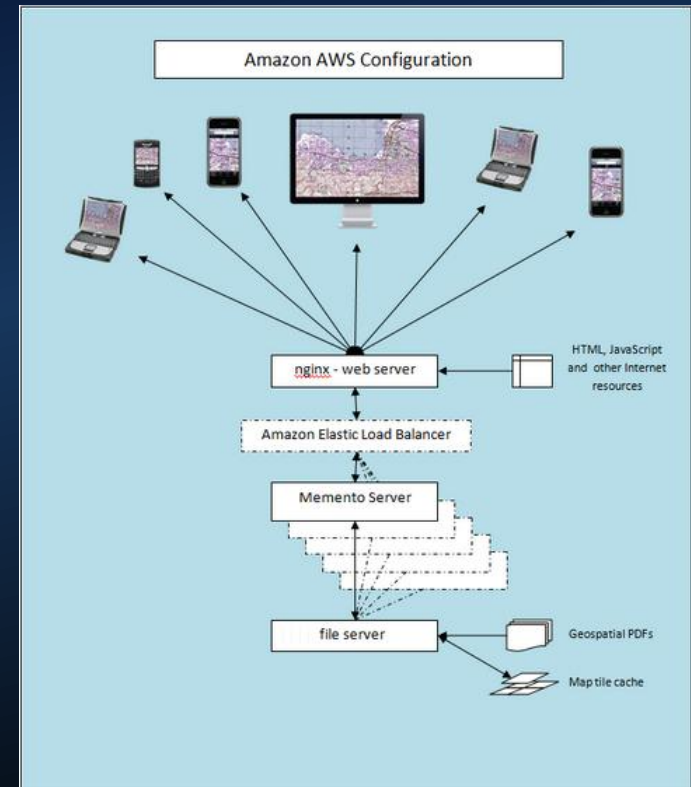
- The Memento[®] Server is easy to configure. Only geospatial PDFs are required for input. No other GIS software is required.
- Lightweight or heavyweight. The Memento[®] Server supports both HTML and SCGI protocols. The advantage is that it can respond to HTML requests in a stand alone environment (e.g. running on a laptop) or it can respond to SCGI requests behind an enterprise web server.
- The Memento[®] Server uses standard web services (WMS, WFS, GEOJSON, ...) to enable open access to its capabilities. One of the core capabilities of the Memento[®] Server is the ability to dynamically de-collar and mosaic sets of geospatial PDFs into a single view.
- The Historical USGS Maps website uses the capabilities of the Memento[®] Server to make it easy to navigate thousands of geospatial PDFs and find maps of interest.



Historical USGS Maps website

<https://historical.northavenue.net>

- Users can select multiple map sets, easily navigate the map sets and open the underlying geospatial PDFs.
- High performance on the Amazon cloud. The Memento[®] Server runs as an Amazon Machine Image (AMI) which enables multiple instances of the Memento Server to run behind an Amazon Elastic Load Balancer.
- nginx handles high volumes of the HTML requests and converts to SCGI for efficient communication with the Memento[®] Server instances.
- 92,000 USGS maps on one file server – just under one terabyte versus over 200TB for the original high resolution GeoTIFFs.

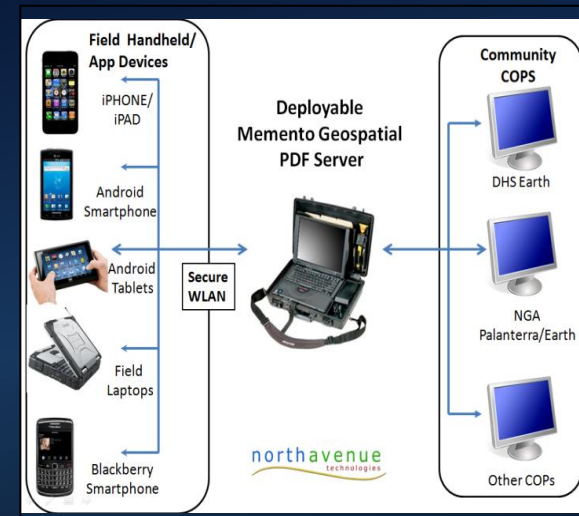


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technologies

North Avenue Technologies

Contact us if you want to deploy a similar solution with your geospatial PDFs.

Our software is easily configurable and can be tailored to your needs.



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